

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	381	(seed) same (NiFeCr or (Ni adj Fe adj Cr) or (nickel adj ferrit\$ adj chromium))	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2006/03/19 16:49
L2	2	("6430014").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	OFF	2006/03/19 16:44
L3	4	((seed adj layer) and (three) and (rough\$)).clm.	US-PGPUB	OR	ON	2006/03/19 16:46
L4	56	((seed adj layer) and (rough\$)).clm.	US-PGPUB	OR	ON	2006/03/19 16:46
L5	2	((three or "3") adj (under adj layer\$2)) same NiFeCr)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2006/03/19 16:47
L6	1	seed same (NiFeCr or (Ni adj Fe adj Cr) and Al2O3 and NiFeCr) same (jagged or uneven or irregular or coarse or turbulent or choppy or bumpy or rugged or rough)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2006/03/19 16:48
L7	419	360/324.1.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2006/03/19 16:49
L8	479	360/324.11.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2006/03/19 16:49
L9	633	360/324.12.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2006/03/19 16:49
S1	203	360/324.1.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2006/03/19 16:49
S2	164	360/324.1.ccls. and ("Ta" or tanta\$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2003/12/15 03:57

## EAST Search History

S3	16	360/324.1.ccls. and ("Ta" or tanta\$5) same "NiFeCr")	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2003/12/15 04:06
S4	123	"360"/\$.ccls. and ("Ta" or tanta\$5) same "NiFeCr")	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2003/12/15 04:01
S5	0	((body adj center\$2) adj cubic) same (NiFeCr) same ("110" adj orient\$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2003/12/16 10:03
S6	0	((body adj center\$2) adj cubic) same (Ni adj Fe adj Cr) same ("110" adj orient\$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2003/12/16 10:03
S7	0	((body adj center\$2) adj cubic) same (Ni adj Fe adj Cr) and ("110" adj orient\$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2003/12/16 10:03
S8	4	((body adj center\$2) adj cubic) same (Ni adj Fe adj Cr)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2003/12/16 10:04
S9	20	((body adj center\$2) adj cubic) same ("110" adj orient\$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2003/12/16 10:08
S10	330	NiFeCr or (Ni adj Fe adj Cr) and ("110" adj orient\$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2003/12/16 10:08
S11	2	((NiFeCr) or (Ni adj Fe adj Cr)) same ("110" adj orient\$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2003/12/16 10:12
S12	330	(NiFeCr) or (Ni adj Fe adj Cr) same ("110" adj orient\$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2003/12/16 10:11

## EAST Search History

S13	16	((NiFeCr) or (Ni adj Fe adj Cr)) same (bcc or (body adj center\$3 adj cubic))	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2003/12/16 10:46
S14	0	360/324.ccls and NiFeCr	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2003/12/16 10:47
S15	4	360/324.ccls. and NiFeCr	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2003/12/16 10:53
S16	25	360/324.1.ccls. and NiFeCr	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2003/12/16 10:54
S17	6	(360/324.1.ccls. and NiFeCr) and bcc	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2003/12/16 10:53
S18	51	360/324.11.ccls. and NiFeCr	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2003/12/16 11:04
S19	6	(360/324.11.ccls. and NiFeCr) and bcc	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2003/12/16 10:54
S20	48	360/324.12.ccls. and NiFeCr	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2003/12/16 11:04
S21	22	360/324.12.ccls. and NiCr	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2003/12/16 11:04
S22	10	360/324.11.ccls. and NiCr	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2003/12/16 11:04

## EAST Search History

S23	19	360/324.1.ccls. and NiCr	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2003/12/16 11:04
S24	15	((body adj center\$2) adj cubic) same (Ni adj Cr)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2003/12/16 11:06
S25	5511	((seed adj layer) or (underlayer) or (seed layer)) same (Ni adj Cr)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2003/12/16 11:08
S26	409	(underlayer or seed or (under near2 layer)) same (NiCr or (Ni adj Cr))	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2003/12/16 11:09
S27	43	360/324\$.ccls. and ((underlayer or seed or (under near2 layer)) same (NiCr or (Ni adj Cr)))	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2003/12/16 11:12
S28	30	(bcc or (body adj center\$ adj cubic)) same ((NiCr) or (Ni adj Cr))	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2003/12/16 13:37
S29	1	(NiFeCr or (Ni adj Fe adj Cr)) same (crystal near2 particle near2 size)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2003/12/16 13:39
S30	1	(NiFeCr or (Ni adj Fe adj Cr)) same ((crystal near2 particle near2 size) or (crystal adj size))	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2003/12/16 13:42
S31	1	(NiFeCr or (Ni adj Fe adj Cr)) same ((crystal\$4 near2 particl\$4 near2 siz\$4) or (crystal adj size))	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2003/12/16 13:43
S32	48	(NiFeCr or (Ni adj Fe adj Cr)) same (size)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2003/12/16 13:44

## EAST Search History

S33	16	(bcc or (body adj center\$ adj cubic)) same ((NiFeCr) or (Ni adj Fe adj Cr))	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2003/12/19 11:22
S34	2	(bcc or (body adj center\$ adj cubic)) same ("110") near3 orientation) and ((NiFeCr) or (Ni adj Fe adj Cr))	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2003/12/19 11:23
S35	56	(bcc or (body adj center\$ adj cubic)) same ("110") near3 orientation)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2003/12/19 11:23
S36	0	"360"/\$.ccls. and (((three or "3") adj (under adj layer\$2)) same NiFeCr)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2004/05/19 12:16
S37	1	(((three or "3") adj (under adj layer\$2)) same NiFeCr)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2006/03/19 16:47
S38	94	((three or "3") adj (under adj layer\$2))	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2004/05/19 12:16
S39	97	(three or "3") adj (under adj layer\$2)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/01/12 11:59
S40	13	((three or "3") adj (under adj layer\$2)) and "360"/\$.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2004/08/04 09:30
S41	13	(((three or "3") adj (under adj layer\$2)) and "360"/\$.ccls.) and "360"/\$.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2004/08/04 09:30
S42	1	((three or "3") adj (under adj layer\$2)) and "369"/\$.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2004/08/04 09:30

## EAST Search History

S43	1440	((three or "3") adj (under adj layer\$2)) or (tri adj layer)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2004/08/04 09:57
S44	67	((((three or "3") adj (under adj layer\$2)) or (tri adj layer)) and "360"/\$.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/06/13 15:17
S45	2	"6687098".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2004/08/04 09:50
S46	18	("4907113"   "5111352"   "5206590"   "5408377"   "5492720"   "5508866"   "5583725"   "5591533"   "5637235"   "5638235"   "5666246"   "5701223"   "5715120"   "5731936"   "5738946"   "5764445"   "5766780"   "5850323").PN.	USPAT	OR	ON	2004/08/04 09:50
S47	1443	((three or "3" or third) adj (under adj layer\$2)) or (tri adj layer)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2004/08/04 09:58
S48	71	((((three or "3" or third) adj (under adj layer\$2)) or (tri adj layer)) and (spin adj valve)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/06/13 15:18
S49	3	"6411476".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2004/08/04 10:06
S50	20	("5018037"   "5103553"   "5543989"   "5598309"   "5666250"   "5801909"   "5835315"   "5850323"   "5858455"   "5888669"   "5898549"   "5923505"   "5959809"   "6076965"   "6077603"   "6127053"   "6141191"   "6143388"   "6185081"   "6208492").PN.	USPAT	OR	ON	2004/08/04 10:13
S51	7	"6411476".URPN.	USPAT	OR	ON	2004/08/04 10:16
S179	297	360/324.1.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/01/12 11:58
S180	297	360/324.1.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/01/12 11:58

## EAST Search History

S181	89	S180 and (seed adj layer)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/01/12 11:58
S182	130	(three or "3") adj (seed adj layer\$2)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/01/12 12:21
S183	136	(three or "3" or trilayer or (tri adj layer)) adj (seed adj layer\$2)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/01/12 14:17
S184	2	("6046892"   "6222707").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2005/01/12 13:03
S185	0	("6775111").URPN.	USPAT	OR	OFF	2005/01/12 13:05
S186	136	(three or "3" or trilayer or (tri adj layer)) adj (seed adj layer\$2)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/01/12 14:24
S187	20	("5018037"   "5103553"   "5543989"   "5598309"   "5666250"   "5801909"   "5835315"   "5850323"   "5858455"   "5888669"   "5898549"   "5923505"   "5959809"   "6076965"   "6077603"   "6127053"   "6141191"   "6143388"   "6185081"   "6208492").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2005/01/12 14:17
S188	11	(three or "3" or trilayer or (tri adj layer)) adj (seed adj layer\$2) and (NiFeCr or (Ni adj Fe adj Cr))	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/01/12 14:31
S189	0	(three or "3" or trilayer or (tri adj layer)) adj (seed adj layer\$2) same (NiFeCr or (Ni adj Fe adj Cr))	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/01/12 14:26
S190	0	(three or "3" or trilayer or (tri adj layer)) adj (seed) same (NiFeCr or (Ni adj Fe adj Cr) or (nickel adj ferrit\$ adj chromium))	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/01/12 14:31
S191	210	(seed adj layer\$2) same (NiFeCr or (Ni adj Fe adj Cr))	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/01/12 15:34

## EAST Search History

S192	219	(seed) same (NiFeCr or (Ni adj Fe adj Cr) or (nickel adj ferrit\$ adj chromium))	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2006/03/19 16:40
S193	217	(S191 or S192) and (trilayer or (tri adj layer\$) or layer\$ or (S187 adj layer) or (three adj layer) or S187 or three)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/01/12 14:34
S194	117	(S191 or S192) and (trilayer or (tri adj layer\$) or (S187 adj layer) or (three adj layer) or S187 or three)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/01/12 14:34
S195	73	(S191 or S192) and (trilayer or (tri adj layer\$) or (S187 adj layer) or (three adj layer))	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/01/12 14:34
S196	9	("5738938"   "5793279"   "5796560"   "6108177"   "6226159"   "6249406"   "6356419"   "6430014"   "6519121").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2005/01/12 14:41
S197	5	("5508867"   "5742162"   "5768071"   "6117569"   "6195240").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2005/01/12 15:03
S198	3	("6430014").URPN.	USPAT	OR	OFF	2005/01/12 15:12
S199	11	((("5849422") or ("5850323") or ("5869963") or ("5896252") or ("6046892"))).PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	OFF	2005/01/12 15:14
S200	0	("8315326.pn.").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	OFF	2005/01/12 15:15
S201	2	"08315326".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	OFF	2005/01/12 15:16
S202	10	(seed adj layer\$2) same (NiFeCr or (Ni adj Fe adj Cr)) same (etch\$)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/01/12 15:43
S203	10	(seed) same (NiFeCr or (Ni adj Fe adj Cr)) same (etch\$)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/06/13 15:00



## EAST Search History

S204	50	(NiFeCr or (Ni adj Fe adj Cr)) same (etch\$)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/01/12 15:51
S205	10	(seed) same (NiFeCr or (Ni adj Fe adj Cr) or (nickel adj ferrit\$ adj chromium)) same (etch\$)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/01/12 16:20
S206	14	(seed) same (NiFeCr or (Ni adj Fe adj Cr)) same (etch\$ or rough)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/06/14 10:25
S207	2	("6674616").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	OFF	2005/06/13 15:04
S208	6	((("6430014") or ("6490140") or ("6674616"))).PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	OFF	2005/06/13 15:05
S209	1	seed same (NiFeCr or (Ni adj Fe adj Cr)) same (jagged or uneven or irregular or coarse or turbulent or choppy or bumpy or rugged or rough)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2006/03/19 16:47
S210	2	seed same (NiFeCr or (Ni adj Fe adj Cr)) same (jagged or uneven or irregular or coarse or turbulent or choppy or bumpy or rugged or rough\$)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/06/13 15:13
S211	0	((((three or "3") adj (under adj layer\$2)) or (tri adj layer)) and seed same (NiFeCr or (Ni adj Fe adj Cr)) same (jagged or uneven or irregular or coarse or turbulent or choppy or bumpy or rugged or rough\$)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/06/13 15:18
S212	0	((((three or "3" or third) adj (under adj layer\$2)) or (tri adj layer)) and (spin adj valve) and seed same (NiFeCr or (Ni adj Fe adj Cr)) same (jagged or uneven or irregular or coarse or turbulent or choppy or bumpy or rugged or rough\$)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/06/13 15:18
S213	0	((((three or "3" or third) adj (under adj layer\$2)) or (tri adj layer)) and (spin adj valve) and (seed same (NiFeCr or (Ni adj Fe adj Cr)) same (jagged or uneven or irregular or coarse or turbulent or choppy or bumpy or rugged or rough\$))	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/06/13 15:18

## EAST Search History

S214	2	(seed) same (NiFeCr or (Ni adj Fe adj Cr)) same (jagged or uneven or irregular or coarse or turbulent or choppy or bumpy or rugged or rough\$)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/06/14 11:36
S215	60	(seed) same (NiFeCr or (Ni adj Fe adj Cr)) and (jagged or uneven or irregular or coarse or turbulent or choppy or bumpy or rugged or rough\$)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/06/14 10:28
S217	14	(seed) same (NiFeCr or (Ni adj Fe adj Cr)) same (jagged or uneven or irregular or coarse or turbulent or choppy or bumpy or rugged or rough\$ or etch\$ or abrad\$)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/06/14 11:41
S218	45	(seed) same (NiFeCr or (Ni adj Fe adj Cr)) same (jagged or uneven or irregular or coarse or turbulent or choppy or bumpy or rugged or rough\$ or etch\$ or abrad\$ or alter\$)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/06/14 11:48
S219	28891	(seed) same (jagged or uneven or irregular or coarse or turbulent or choppy or bumpy or rugged or rough\$ or etch\$ or abrad\$ or alter\$)	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/06/14 12:48
S220	1559	360/324\$.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/06/14 11:49
S221	192	S219 and S220	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/06/14 12:41
S222	195	S219 and 29/603\$.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/06/14 12:42
S223	129	(seed) same (jagged or uneven or irregular or coarse or turbulent or choppy or bumpy or rugged or rough\$ or etch\$ or abrad\$ or alter\$) and (NiFeCr or (Ni adj Fe adj Cr))	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/06/14 12:51
S224	38	(jagged or uneven or irregular or coarse or turbulent or choppy or bumpy or rugged or rough\$ or etch\$ or abrad\$ or alter\$) near5 seed and (NiFeCr or (Ni adj Fe adj Cr))	US-PGPUB; USPAT; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/06/14 12:50